



contact has already occurred and that the system failed to avoid it.” Thus, Applicants submit that the Specification also discloses an additional embodiment, where “an algorithm [] judges whether there is any physical contact between the X-ray imaging systems,” as recited in claims 5 and 10-12. Therefore, Applicants respectfully request that the rejection be reconsidered and withdrawn.

### **Rejection Under 35 U.S.C. § 103**

Claims 1-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,435,713 to Iizuka in view of U.S. Patent No. 6,272,368 to Alexandrescu. The Examiner contends that Iizuka discloses most of the claimed features. The Examiner acknowledges that Iizuka fails to disclose a means by which the positional relation detecting means monitors the positions of the x-ray imaging system. However, the Examiner relies on Alexandrescu as disclosing a shape registering means. The Examiner states that it would have been obvious for a person of ordinary skill in the art at the time of the invention to combine Iizuka and Alexandrescu to achieve the claimed invention.

Amended independent claims 1, 17 and 19 recite “a shape data registering means of the X-ray imaging system for registering external shape data of three dimensional models corresponding to three dimensional shapes of objects, wherein the models are in a voxel data tree format.” Support for this amendment can be found in the Specification, page 12, last paragraph bridging through page 13, second full paragraph, where it discloses that voxel data is converted into binary separated partition tree data. This tree voxel format enables a position relation detecting means to simplify calculation for obtaining information regarding positional relation between objects. Applicants submit that Iizuka and Alexandrescu neither disclose nor suggest, singly or in combination, “models [] in a voxel tree data format,” as claimed in claims 1, 17 and 19.

Applicants respectfully request reconsideration and withdrawal of the rejection.

## CONCLUSION

Each and every point raised in the Office Action dated October 24, 2005 has been addressed on the basis of the above amendments and remarks. In view of the foregoing it is believed that claims 1-19 are in condition for allowance and it is respectfully requested that the application be reconsidered and that all pending claims be allowed and the case passed to issue.

If there are any other issues remaining which the Examiner believes could be resolved through a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

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Respectfully submitted,

By

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